MOTOAMERICA MINICUP - OHVALE TECHNICAL REGULATIONS GP-0 & GP-2

Motorcycles participating in the MotoAmerica Mini Cup Ohvale GP-0 must comply with the provisions of this regulation. As set out in the Sporting Regulations, this Championship is divided into categories based on age/machine:

- GP-0 110 4Speed (ages 6-10)
- GP-0 160 4Speed (**ages 9-14**)
- **GP-2 190** Daytona 4Speed (ages 10-14)

A rider may participate in a maximum of (2) classes within their applicable age bracket. However, a rider in the 110 class is not permitted to ride in the 190 class.

If the Technical Director requests parts for compliance or dispute, the manufacturer (or distributor) is required to deliver to MotoAmerica the part and / or documentation relating to approved motorcycles.

Motorcycle may use parts or kits specified and/or provided by the manufacturer.

Except as explicitly authorized by this regulation and all the components of the motorcycle must be kept original, therefore as originally produced by the manufacturer.

If not specified, the front, side and rear views of the motorcycles will conform to the appearance of the model as originally produced by the manufacturer. The physical appearance of exhaust system is excluded from this standard.

ART. 1 - GENERAL

1.1 - The weight of the motorcycle in running order shall not be less than values shown below:

a) GP-0 110 4 Speed Kg. 64.

b) GP-0 160 4 Speed Kg. 65.

c) GP-2 190 Daytona Kg. 68.

1.2 - **SEALING AND ENGINE QUOTA (see Engine Sealing addendum for more information)**

1.2.1 - Only factory sealed engines or engines re-sealed by an organization certified by Ohvale may be used in the MiniCup Championship among all classes.

1.2.2 - During the whole season engines may be sealed or torn down at the direction of the Technical staff at any time and checked for compliance.

1.2.3 - A factory sealed engine is defined as an engine purchased, brand new, from Ohvale or an official Ohvale dealer. This engine already has the factory seal affixed. A re-sealed engine is defined as engine that has been repaired/rebuilt and/or checked for compliance by an organization/individual certified by Ohvale and will then have a new factory seal affixed.

1.2.4 - Competitors are permitted to have a maximum (2) engine seals per season. If a competitor uses any engine seals (new engines) beyond that allotment then that competitor will have to start from the back of the grid for that event.

1.2.5 - Engines presented for technical control sealing, must have the screws already drilled to be tied as follows:

a) Categories GP-0 110 4Speed and GP-0 160 4Speed engines, the seal will be applied to the fixing screws of the timing cover.

b) Category GP-2 190 Daytona engines, the seal will be applied on the left side that connects and the cylinder to a screw to the crankcase.

1.2.6 - Serial numbers on the seals will be recorded by technical staff. Sealed engines may be torn down for inspection when they are removed from service or after a race event. If inconsistencies are found, that competitor will have their results voided retroactively to the first event that engine was put into service.

1.2.7 - Any change in engine during the race weekend should be reported immediately to an official so the engine seal may be properly recorded. Failure to do so could result in disqualification.

1.3 - ENGINE COMPLIANCE AND PROTESTS

1.3.1 - All competitors are subject to random teardowns to check for engine compliance even if engine has been sealed. Failure to comply with will result in disqualification for that event.

1.3.3 - If a competitor wishes to protest another competitor's engine, they must pay $200. If the engine is found to be legal, that competitor forfeits the $200 fee. If the engine is found to be illegal, the offending competitor must pay back the $200 and they will be disqualified from that event.

1.3.4 - Engine tags will be tracked from the start of the season, at every round, for every competitor. If, during a random teardown, any violations are discovered, it will result in the cancellation of any results from events in which that engine was used.

1.4 - OHVALE APPROVED ENGINE CERTIFICATION CENTERS

1.4.1 - The following organizations are approved to certify and affix a factory seal to all Ohvale engines used in the MiniCup:

1. Eleven Motorsports

   9012 Performance Court

   Cresson TX 76035

   info@elevenms.com

ART. 2 - CHASSIS

2.1 - FRAME

2.1.1 - The frame must be kept original, is only permitted to fit the chassis anti-vibration plate produced in kit by the manufacturer for the model of motorcycle in use. The painting of the frame is free but its polishing is prohibited. The use of shells to protect the swingarm or frame is prohibited.

2.2 - SEAT POST FRAME

2.2.1 - The seat post frame must be kept original. The painting of the seat post frame is free but its polishing is prohibited.

2.3 - FRONT FAIRING FRAME

2.3.1 - The front fairing frame must be kept original. Painting of front fairing frame is free but polishing is forbidden.

2.4 - SWINGARM

2.4.1 - Except as authorized in the following articles, the swing-arm and swing-arm pivot must be kept original.

2.4.2 - Replace the original chain tensioner registers with the racing ones produced by the manufacturer for the model of motorcycle in use, is permitted.

2.4.3 - All motorcycle must be equipped with a solid protective chain guard (shark fin) fixed to the swing-arm produced by the manufacturer of motorcycle.

2.5 - STEERING PLATES

2.5.1 - The upper and lower fork clamps (triple clamp, fork bridges), and the steering axle must remain as originally produced by the manufacturer on the homologated motorcycle, as well as the steering lock stops device.

2.5.2 - The steering stem must remain in its original position.

2.6 - HANDLEBARS AND CONTROLS

2.6.1 - **Except as authorized in the following articles, the handlebars, the handlebar clamps, the manual controls (throttle control, brake and clutch levers and electric controls), and the handlebar terminal must be kept original.**

2.6.2 - **Handlebars and manual controls (clutch and brake levers) must stay original.** Can be repositioned, but a minimum clearance of 30 mm must be maintained between the tank and the handlebars, including any accessories attached to it.

2.6.3 - It is forbidden to enter the track without ball end inserts in the handlebar ends.

2.6.4 - Is forbidden to repair the handlebars by welding.

2.6.5 - The control levers on the handlebars (brake and clutch) must always have rounded edges and must have a ball-form ending.

2.6.6 - In any position of the steering and the front suspension, the control levers on the handlebars must not touch any component of the motorcycle.

2.6.7 - Throttle controls must be self-closing when not held by hand.

2.6.8 - It is mandatory to use the brake lever guard supplied in the specific kit for the model of motorcycle in use, which protects the front brake lever from any involuntary actuations resulting from the contact between two motorcycles.

2.6.9 - **Handlebars and controls must be original OEM equipment only.**

2.7 - FOOTREST AND CONTROLS

2.7.1 - Except as authorized in the following articles, the footrests, and foot control must be kept original.

2.7.2 - Footrests and foot controls can be repositioned only using the setting originally provided by the manufacturer.

2.7.3 - Gear shift pedal and his leverage can be replaced to use one of “overturned” type (GP Shift).

2.7.4 - The rear brake lever peg may also be positioned on the first lowering slot in the front part of the lever.

2.7.5 - It is forbidden to repair the footrests by welding.

2.7.6 - It is forbidden to enter the track with footrests having the plastic material plugs in poor condition or without a mounted end plug.

2.7.7 - It is forbidden to repair the footrest supports by welding.

2.7.8 - Footrests and controls must be original OEM equipment only.

2.8 - START LEVER

2.8.1 - In GP-0 110 4Speed, GP-0 160 4Speed and GP-2 190 Daytona classes, the starting lever of the original engine must remain mounted and running and be equipped with a system that prevents accidental opening (example: elastic) .

Art. 3 SUSPENSION

3.1 - FRONT SUSPENSION

3.1.1 - Except as authorized in the following articles, the fork must be kept original in every component.

3.1.2 - In all Categories it is permissible to replace the original fork with the "+5" fork originally assembled on motorcycles produced from 2019.

3.1.3 - Position of the fork stems respect to the steering plates is free.

3.1.4 - The fork spring preload system and / or the cartridges that are included in the specific kit provided by the manufacturer for the motorcycle model in use may be used.

3.1.5 - Position of the hydraulic registers, the elastic coefficient (K) and the preload of the main springs are free.

3.1.6 - Front suspension cartridges/internals may only be replaced with kits other than specified by manufacturer with prior written approval from MotoAmerica Mini Cup officials.

2022 Homologated front suspension cartridges (GP-0 110 & 160 classes only):
1) Andreani cartidges 105/OV1E
2) K-Tech cartridges 20IDS

2022 Homologated front suspension cartridges (GP-2 190 class only):
3) Mupo D.38 front fork kit

3.2 - STEERING DAMPER

3.2.1 - Steering damper is allowed with approval of chief technical steward at event.

3.2.2 - In no case may the steering damper act as a steering lock limiting device

3.3 - REAR SUSPENSION

3.3.1 - Except as authorized in the following articles, the rear suspension must be kept original in every component.

3.3.2 - Links and mounting points of the rear suspension to the chassis and swing arm, must be kept original.

3.3.3 - The original shock absorber may only be replaced with one of those belonging to the specific kit for the model of motorcycle in use.

3.3.4 - The length of the shock absorber, the position of the hydraulic registers, the elastic coefficient (K) and the preload of the main spring of the shock absorber are free.

3.3.5 - Rear suspension may only be replaced with kits other than specified by manufacturer with prior written approval from MotoAmerica Mini Cup officials.

2022 Homologated front suspension cartridges (GP-0 110 & 160 classes only):
1) Ohlins S36PR1C1
2) K-Tech Razor-R

2022 Homologated rear suspension (GP-2 190 class only):
3) Ohlins S36PR1C1
4) K-Tech Razor-R

Art.4 BRAKE SYSTEM

4.1 - BRAKE DISCS

4.1.1 - The brake discs must remain as originally produced by the manufacturer for the motorcycle.

4.1.2 - The Ohvale 160 models are allowed to replace the original disc using the 190mm floating disc kit produced by the manufacturer for the model of motorcycle in use.

4.2 - BRAKE CALIPERS

4.2.1 - Except as authorized in the following article, the front and rear brake calipers, as well as all their fixing points and all anchor pieces, must be kept original.

4.2.2 - It is mandatory to mount original brake pads or, alternatively, those brake pads which are included in the manufacturer's specific kit for the model of motorcycle in use.

4.2.3 - Brake pads may only be replaced with kits other than specified by manufacturer with prior written approval from MotoAmerica Mini Cup officials.

4.3 - MASTER CYLINDERS

4.3.1 - Brake master cylinders (front and rear) and the related pipes must be kept original

4.3.2 - Installation of a protection of the master cylinder positioned on the handlebar is authorized to prevent oil leaks in a crash.

Art. 5 - WHEELS

5.1 - Wheel rims and their spindles must be kept original. In all the dimensions of the wheel rims should be as indicated below:
Front Wheel 2.50” x 10”
Rear Wheel 3.00” x 10”

Art. 6 - TIRES

6.1 - The only tires admitted to the championship are those indicated here below:

6.1.1 -	**Front tire (110/160)**	**Dunlop – Sportmax Slick 100/90-10 - Soft**
	Rear tire (110/160)	**Dunlop – Sportmax Slick 120/80-10 - Medium Soft**
	Front tire (GP2 190)	**Dunlop – TT93GP Pro 100/90-12 - Soft**
	Rear tire (GP2 190)	**Dunlop – TT93GP Pro 120/80-12 - Medium Soft**

6.2 - In the event that the qualifying practices or the race are declared "wet" it is allowed the use of rain tires in the measures indicated below:

6.2.1 -	**Front tire (110/160)**	**Dunlop – Sportmax Rain 100/90-10**
	Rear tire (110/160)	**Dunlop – Sportmax Rain 120/80-10**
	Front tire (GP2 190)	**Dunlop – KR345 100/485-12**
	Rear tire (GP2 190)	**Dunlop – KR345 120/500-12**

6.3 - It is specified that when mounting the tire on the wheel rim it is mandatory to respect the direction of travel indicated by the manufacturer.

6.4 - The use of tire warmers is not allowed on the starting grid.

Art. 7 - TANK AND FUEL SYSTEM

7.1 - TANK

7.1.1 - Tank and tank cap must remain as originally produced by the motorcycle manufacturer.

7.1.2 - Fuel tank must be filled with spongy fire-retardant material (such as "Explosafe").

7.3 - FUEL LINE

7.3.1 - The fuel circuit, understood as the set of ducts and devices between the tank and the carburetor, is free.

7.3.2 - Replacement of the fuel cock is permitted.

7.3.3 - The addition of fuel filters is permitted.

7.3.4 - Use of quick connectors for fuel pipes is permitted.

7.4 - FUEL

7.4.1 - The only fuel allowed is the lead-free one specified in the FIM Technical Rules provided by MotoAmerica.

Art. 8 - INTAKE SYSTEM

8.1 - INTAKE SYSTEM GENERAL

8.1.1 - Except as authorized in the following articles, the fuel system must be kept original.

8.2 - CARBURETOR

8.2.1 - Is mandatory the use of the carburetors indicated in the following points:

- Category GP-0 110 4 Speed	**Mikuni VM 24**
	Mikuni VM22
	Dell'Orto PHBL 24
- Category GP-0 160 4 Speed	**KF PZ 27**
	KEIHIN PE 28
	Dell'Orto PHBH 28 BD
- Category GP-2 190 Daytona	**KEIHIN PE 28**
	Dell'Orto PHBH 28 BD

8.2.2 - The diffuser section and the number of jets cannot be modified; the remaining carburetor components are free.

8.2.3 - The use of pumps or power-jet is not permitted.

8.3 - AIR FILTER

8.3.1 - The air filter is mandatory and must be as indicated in the points below.

8.3.2 - The use of the metallic air filter must be part of the kit specific for the model of motorcycle in use.

8.3.3 - Use of systems to increase the pressure inside the box filter using the dynamic air pressure when the motorcycle is in movement is forbidden.

Art. 9 - ENGINE

9.1 - ENGINE GENERAL

9.1.1 - Except as expressly permitted in the following articles, the engine must remain completely original.

9.1.2 - The only engines allowed are those indicated in the points to follow:

a - Category GP-0 110 4Speed	ZONGSHEN W110G
b - Category GP-0 160 4 Speed	ZONGSHEN W155
c - Category GP-2 190 Daytona	DAYTONA ANIMA FDX 190

9.1.3 - Bore and Stroke must remain original.

9.1.4 - Is mandatory to use the right-side engine lateral cover included in the kit included in the specific kit for the model of motorcycle in use supplied by the manufacturer.

9.1.5 - It is mandatory to run the engine exhaust pipes into a recovery tank with a minimum capacity of 250cc.

9.2 - ENGINE HEAD

9.2.1 - Except as authorized in the articles to follow, Any type of machining for the removal of material (including polishing) and application of material (including surface treatment) is prohibited.

9.2.2 - Intake and Exhaust ports must remain original.

9.2.3 - Valves, valve seats, valve guides, tappets, oil seals must be the original. Only normal maintenance provided by the service manual is permitted.

9.2.4 - The springs, half-cones and valve plates must remain original. Valve spring shim are not allowed.

9.2.5 - It is allowed to surface the head plane to restore the surfaces according to what is indicated in the technical instructions provided by the manufacturer.

9.2.6 - The volume of the combustion chamber and the height of the squish must comply with the values indicated in the following table:

Category	Volume (cc)	Squish* (mm)
Category GP-0 110 4 Speed	10.0 +/- 0.4	1.00
Category GP-0 160 4 Speed	13.5 +/- 0.4	0.60
Category GP-2 190 Daytona	14.8 +/- 0.4	1.25

*no allowance is admitted on the height of the squish.

9.2.7 - Spark plug is free. None of the parts of the spark plug, beside electrodes, can protrude out the interior of the combustion chamber.

9.3 - VALVES TIMING DIAGRAM

9.3.1 - Any modification of the camshaft is prohibited.

9.3.2 - Timing driven sprocket, must be kept original. Modification or increase of the diameter of the fixing holes are not allowed.

9.3.3 - Chain timing and the timing chain tensioner must be kept original.

9.4 - CYLINDER

9.4.1 - Cylinder must be kept original.

9.4.2 - Any surface treatment of the inner wall of the cylinder is prohibited.

9.5 - PISTON

9.5.1 - Any modification to the piston, including polishing and lightening, is It prohibited.

9.5.2 - Any modification to ring set, pins and their holders is prohibited.

9.6 - CONNECTING ROD

9.6.1 - Any modification to the rod, including lightening and polishing, is prohibited.

9.7 - CRANK SHAFT

9.7.1 - Engine shaft must remain original, any modification included lightening, balancing and polishing is prohibited.

9.8 - CRANK CASE

9.8.1 - The engine crankcase and engine crankcase covers must remain original, even with regard to color and surface finishing. It is only allowed making holes on the flywheel cover to help the cooling of the internal parts, according to what has been reported in the homologation documents.

9.8.2 - It is forbidden to repair the crankshafts and engine covers by applying any material.

Art. 10 – TRANSMISSION

10.1 - PRIMARY TRANSMISSION

10.1.1 - The gears of the primary drive (on the crankshaft and on the clutch) must be kept original.

10.2 - CLUTCH

10.2.1 - On motorcycles in the GP-0 110 4 Speed category all components of the clutch (clutch bell, clutch inner drum, hub clutch, pressure plate, drive friction discs, outer friction discs, push plate and springs) must be kept original.

10.2.2 - On the motorcycles of the GP-0 160 4 Speed and GP-2 190 Daytona categories, the "EVR by OHVALE" slipper clutch kit included in the specific kit for the model of motorcycle in use is allowed.

10.3 - GEAR BOX

10.3.1 - On GP-0 110 4Speed, GP-0 160 4Speed and GP-2 190 Daytona motorcycles, any change to the gearbox, understood as the assembly consisting of the gear selection system and drive forks, primary and secondary shafts and their gears transmission is prohibited.

10.3.2 - Any kind of treatment on the surface for reducing friction (including polishing and superfinishing) is forbidden.

10.4 - FINAL TRANSMISSION

10.4.1 - Final transmission (pinion, crown and chain) may be replaced with the kits available through the manufacturer.

Art. 11 - COOLING AND LUBRICATION SYSTEM

11.1 - OIL COOLER

11.1.1 - The oil cooler must remain original.

11.2 - OIL CIRCUIT

11.2.1 - Any modification to the oil pump is prohibited.

11.2.2- The oil pipes that connect the engine to the oil cooler must be kept original. The engine breather must be put into a tank with a minimum volume of 250cc.

11.2.3 - The oil inlet and discharge plugs, the delivery and return pipes to the oil cooler and the oil filter cover screws must be perfectly sealed and secured with a binding wire to prevent accidental opening.

Art. 12 - ELECTRICAL SYSTEM

12.1 - WIRING AND ELECTRIC CONTROLS

12.1.1 - The main wiring must be kept original.

12.1.2 - The electric controls on the handlebar can be repositioned, but not replaced or removed.

12.1.3 - It is mandatory to keep the ignition kill switch mounted on the right side of the handlebar.

12.2 - ENGINE IGNITION AND CONTROL

12.2.1 - Except as authorized in the following articles, the engine ignition and control system (rotor, stator engine control unit and coil) must be kept original.

12.2.2 - Only on the motorcycles of the GP-0 190 Daytona Category it is mandatory to fit the ignition and engine control system equipped with the model produced from 2018. In all remaining categories the ignition system must be kept original.

12.2.3 - At any time of the event, the Chief Technical Steward has the right to request the replacement of any components of the engine ignition and control system mounted on the motorcycle. The refusal to proceed with the replacement is equated with a technical irregularity.

12.3 - ENGINE CONTROL SENSORS

12.4.1 - The use of electronic shift assistance systems (quick-shifter) is allowed only in the GP-2 190 class.

2022 Homologated quick-shifters:

1) **HealTech QSH-OV1**
2) **IRC Components - Ohvale**
3) **SP Quickshifter - Ohvale**

12.4 - ADDITIONAL EQUIPMENT

12.5.1 - With the exception of what is authorized in the following articles, any electrical or electronic components (sensor, control unit, display) that are additional or not originally mounted on the motorcycle, are forbidden.

12.5.2 - Use of electronic equipment with IR (infrared) technology, GPS or radio timing detection is allowed.

12.5.3 - It is allowed to mount one or more systems (dashboards, displays, etc.) to display the parameters indicated in the points below:

- RPM
- Oil temperature
- Lap Time
- Engine Hours
-Shift Light
-Gear Position

12.5.4 - Integrated dashboards with electronic tracing function, geolocation and data acquisition, is allowed. The data acquisition must be just limited to the channels listed below:
- RPM
- Oil temperature
- Lap Time
- Engine Hours
- Position and speed (by GPS signal).

12.5.5 - All motorcycles must mount the rear safety light included in the specific kit for the model of motorcycle in use. The team must ensure that the light is switched on whenever Race Director declares wet race or practice.

12.5.6 - The presence of cables or electronic components or of not clear origin are not allowed and is considered as a technical irregularity.

Art. 13 FAIRINGS

13.1 - FAIRING GENERAL

13.1.1 - Except as authorized in the following articles, the fairing, the saddle, the front and rear mudguard and all the superstructures that make up the motorcycle body, must be kept original.

13.1.2 - Color and graphics are free.

13.1.3 - The use of carbon fiber components is not permitted.

13.1.4 - All logos and designs on competitors' motorcycles are subject to final approval by MotoAmerica Mini Cup officials.

13.2 - FAIRINGS

13.2.1 - Except as authorized in the following articles, the fairing must be kept original.

13.2.2 - Only on the motorcycles of the categories GP-0 110 4Speed and GP-0 160 it is permissible to modify the fairing as indicated in the following points:

13.2.3 - Replace the original front fairing and / or fairing with those originally fitted on motorcycles produced from 2019.

13.2.4 - Fit the aerodynamic "wings" including the specific kits for the model of motorcycle in use.

13.2.5 - The windshield must remain original. The windshield can be colored and not transparent in order to accommodate the table and the front race number.

13.2.6 – The size and shape of the cooling holes of the oil cooler are free. It is recommended to mount protective grilles or wire mesh to protect the oil cooler.

13.2.7 - The original fairing brackets can be replaced with quick-release attachments.

13.2.8 - The lower fairing must have a perfect seal in order to contain lubricant leaks in the event of engine failure.

13.2.9 - The lower fairing must incorporate two holes of 14 mm in the bottom of the front lower area. This hole must remain closed in dry conditions and must be opened only in wet race conditions, as declared by the Race Director.

13.3 - MUDGUARDS

13.3.1 - Only in the categories GP-0 110 4Speed and GP-0 160 it is permissible to replace the original fender with the original one fitted on motorcycles produced from 2019.

13.3.2 - The distance between the front mudguard and the tire may be increased.

13.3.3 - The rear mudguard must be kept original.

13.4 - SEAT

13.4.1 - Saddle seat can be changed.

13.5 - NUMBER PLATE AND RACE NUMBERS

13.5.1 - The colors of the tables and race numbers are as follows:

Category	Background	Number
Category GP-0 110 4 Speed	RED	YELLOW
Category GP-0 160 4 Speed	YELLOW	BLACK
Category GP-2 190 Daytona	WHITE	BLACK

13.5.2 - Numbers made from material such as duct tape are prohibited.

13.5.2 - Front and side race numbers must have a minimum height of 6 inches.

13.5.4 - Background must extend a minimum of 1” beyond numbers.

Art. 14 - EXHAUST SYSTEM

14.1 - Except as authorized in the article to follow, in all categories the exhaust system must be kept original.

14.2 - **Only in the GP-2 190 Daytona category it is permissible to use aftermarket exhaust systems. The following systems are permitted (contact MotoAmerica for permission to use other systems):**

2022 Homologated exhaust systems:

1) **Arrow - Ohvale OEM**
2) **Yoshimura RS-9T**

14.3 - In all categories, the maximum permissible photometric level is 97 dB / A at a speed of 5500 rpm.

Art. 15 - SCREW AND BOLTS AND FIXING ELEMENTS

15.1 - GENERAL

15.1.1 - Bolts and fairing fixing elements are free but must have the same size as the originals and with a strength class equal to or greater than the original. Fairings fixing elements may be replaced by fast fixing ones..

15.1.2 - The use of titanium or aluminum bolts and titanium or carbon fiber and / or Kevlar fasteners, if not originally on the motorcycle or part of the specific kit for the model of motorcycle in use is prohibited.

15.2 - ENGINE BOLTS

15.2.1 - The original engine bolts can be replaced with another one of equal size and with a strength class equal to or greater than the original.

15.2.2 - Where required it is permissible to drill holes for the passage of the binding threads, but any modification tending to a lightening is prohibited.

15.2.3 - Resetting the threads with the use of helicoil is permitted.